


Research paper

Media Literacy and Peer Collaboration as Predictors of Civic Engagement among Pre-Service Teachers in Oyo State

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ABSTRACT

Anchored in Social Cognitive Theory, this study investigated media literacy and peer collaboration as predictors of civic engagement among pre-service teachers in Oyo State, Nigeria. Using a correlational survey design, data were collected from 310 year-three pre-service teachers in two public Colleges of Education through researcher-developed measures of media literacy, peer collaboration, and civic engagement. Results indicated moderate levels of media literacy and civic engagement, with relatively positive peer collaboration. Pearson correlation analysis showed significant positive relationships between media literacy and civic engagement ($r = 0.481$, $p < .05$) and between peer collaboration and civic engagement ($r = 0.462$, $p < .05$). Multiple regression analysis further revealed that media literacy and peer collaboration jointly predicted civic engagement ($R^2 = 0.39$, $F(2, 307) = 102.45$, $p < .01$), with media literacy showing stronger predictive influence ($\beta = 0.42$) than peer collaboration ($\beta = 0.34$). Regression diagnostics indicated no major violations of assumptions. The study suggests that strengthening media literacy competencies and collaborative learning structures in teacher education may support civic engagement among prospective teachers.

Keywords: media literacy, peer collaboration, civic engagement, pre-service teachers

In an era characterized by rapid technological advancements and the pervasive influence of media in daily life, the development of media literacy among individuals has become increasingly important. For pre-service teachers, achieving a high degree of media literacy is crucial as they prepare to guide future generations in navigating the complex information landscape. Media literacy involves the ability to access, analyze, evaluate, and create media in various forms, empowering individuals to make informed decisions and actively participate in civic life. In the context of education, civic engagement refers to the ways in which individuals participate in their communities and contribute to democratic processes, including activities such as voting, community service, advocacy, and participation in public discourse (OECD, 2018). While civic engagement is often examined among general youth or adult populations, its relevance to pre-service teachers is particularly significant. Pre-service teachers represent a strategic group within society because they are future educators who will play a central role in shaping students' civic values, democratic attitudes, and critical thinking skills. As future classroom practitioners, they are not only expected to model responsible citizenship but also to cultivate civic competence among learners. Therefore, understanding the factors that influence their own civic engagement is essential. Examining media literacy and peer collaboration among pre-service teachers provides insight into how teacher education programs can intentionally prepare educators who are both pedagogically competent and

democratically engaged. In the Nigerian context, where teachers serve as key agents of socialization and national development, focusing on pre-service teachers is both timely and necessary.

As society increasingly relies on digital platforms for communication and information dissemination, the necessity for educators to incorporate media literacy into their teaching practices has become paramount. Research has shown that media literacy can enhance critical thinking skills, increase awareness of social issues, and foster active participation in civic matters (Hobbs, 2017; Kahn, 2021, Ogundipe & Oyewole, 2025; Emmanuel & Oyewole, 2025). For pre-service teachers, developing these skills not only prepares them to educate their future students about media consumption but also equips them to engage as informed citizens. However, the ways in which pre-service teachers engage in media literacy and how it relates to their civic engagement in the Nigerian context, particularly in Oyo State, remains under-researched.

Peer collaboration is another essential factor influencing civic engagement among pre-service teachers. Collaborative learning environments allow individuals to share perspectives, engage in discussions, and collectively address civic issues, thereby strengthening their commitment to active participation in societal matters (Johnson & Johnson, 2019; Ogundipe & Oyewole, 2025). Studies suggest that when pre-service teachers work collaboratively, they are more likely to develop a deeper understanding of civic responsibilities and engage with their communities meaningfully (Harris & Dorman, 2018). Nonetheless, the specific dynamics of peer collaboration in relation to civic engagement among pre-service teachers in Oyo State warrant further exploration.

Incorporating media literacy into teacher education programs is necessary as it aligns with the increasing demands for educators to prepare students for the realities of a media-saturated environment. However, existing literature primarily examines media literacy and civic engagement independently, leaving a gap in understanding how these constructs interact in shaping the civic participation of pre-service teachers (Milner, 2019). Given the unique socio-cultural and educational context of Nigeria, it is crucial to investigate how media literacy and peer collaboration collectively influence pre-service teachers' civic engagement in Oyo State.

The relationship between media literacy, peer collaboration, and civic engagement represents a growing area of interest within educational research. Studies indicate that higher levels of media literacy enable individuals to better understand civic issues and mobilize for social change, while collaborative environments enhance the likelihood of civic participation (MediaSmarts, 2020). However, empirical evidence exploring the specific role of media literacy and peer collaboration as predictors of civic engagement among pre-service teachers in Nigeria is limited. This study seeks to fill this gap by examining the relationship between these variables, providing important insights for the development of teacher education curricula that promote civic engagement in Oyo State.

Objectives of the study

The general objective of this study is to examine how media literacy and peer collaboration predict civic engagement among pre-service teachers in Oyo State. The specific objectives are to:

1. determine the level of media literacy among pre-service teachers in Oyo State.
2. assess the extent of peer collaboration among pre-service teachers in Oyo State.
3. investigate the level of civic engagement among pre-service teachers in Oyo State.
4. examine the relationship between media literacy and civic engagement among pre-service teachers in Oyo State.
5. explore the relationship between peer collaboration and civic engagement among pre-service teachers in Oyo State.
6. examine the extent to which media literacy and peer collaboration predict civic engagement among pre-service teachers in Oyo State.

Research questions

The following research questions were raised and answered to guide this study:

1. What is the level of media literacy among pre-service teachers in Oyo State?
2. To what extent do pre-service teachers in Oyo State engage in peer collaboration?
3. What is the level of civic engagement among pre-service teachers in Oyo State?
4. Is there a significant relationship between media literacy and civic engagement among pre-service teachers in Oyo State?
5. Is there a significant relationship between peer collaboration and civic engagement among pre-service teachers in Oyo State?
6. To what extent do media literacy and peer collaboration predict civic engagement among pre-service teachers in Oyo State?

LITERATURE REVIEW

Civic education and pre-service teachers

Civic education plays a fundamental role in preparing individuals to function effectively within democratic societies. It encompasses the development of civic knowledge, democratic values, critical thinking skills, and active participation in societal affairs. According to the OECD (2018), civic competence involves not only understanding democratic institutions but also engaging responsibly in civic and political life. In teacher education, civic education is particularly significant because teachers are central agents in transmitting democratic values and fostering civic responsibility among students. Pre-service teachers occupy a unique position in this regard. As future educators, they are expected to model democratic attitudes, encourage critical inquiry, and cultivate civic awareness in their classrooms. Studies have shown that teachers' own civic beliefs and engagement levels significantly influence how they approach civic instruction (Sang, 2019). When pre-service teachers demonstrate strong civic dispositions, they are more likely to integrate participatory and discussion-based approaches into their teaching practices.

In the Nigerian context, civic education has gained prominence as a strategy for promoting national unity, democratic stability, and responsible citizenship. However, research focusing specifically on the civic engagement of pre-service teachers remains limited. While several studies have examined civic participation among university students generally, there is insufficient attention given to those preparing for teaching careers. Investigating civic engagement among pre-service teachers is therefore critical, as their professional roles extend beyond content delivery to include moral and civic mentorship.

Media literacy and civic engagement

Media literacy has increasingly been recognized as a crucial component of civic competence in the digital age. Hobbs (2017) argues that individuals who possess strong media literacy skills are better equipped to critically evaluate information, identify misinformation, and participate meaningfully in democratic processes. In digitally mediated societies, civic engagement often occurs through online platforms, making media literacy an essential skill for informed participation. Empirical studies suggest a positive relationship between media literacy and civic engagement. Milner (2019) found that individuals with higher media literacy levels demonstrate greater political awareness and are more likely to engage in civic activities. Similarly, MediaSmarts (2020) highlights that critical media consumption enhances civic reasoning and democratic participation. For pre-service teachers, media literacy is particularly important because they are expected not only to navigate media environments responsibly but also to teach students how to do so. Despite this growing recognition, few studies have examined media literacy as a predictor of civic engagement among pre-service teachers in Nigeria. This gap underscores the importance of exploring how media literacy skills contribute to civic involvement within teacher education programs.

Peer collaboration and civic engagement

Collaborative learning environments have been widely associated with increased civic awareness and participatory behaviors. Johnson and Johnson (2019) emphasize that cooperative learning fosters communication skills, empathy, and shared responsibility—qualities that are essential for democratic citizenship. Through peer collaboration, individuals are exposed to diverse perspectives, which enhances their understanding of social issues and strengthens their commitment to civic participation. For pre-service teachers, peer collaboration is a core component of professional preparation. Collaborative discussions, group projects, and shared academic tasks create opportunities for dialogue about societal issues and collective problem-solving. Research indicates that such collaborative experiences can deepen civic understanding and promote democratic engagement (Harris & Ewing, 2021). However, empirical investigations examining peer collaboration as a predictor of civic engagement within Nigerian teacher education institutions remain scarce. Addressing this gap is important in understanding how structured collaborative experiences can enhance civic outcomes among future educators.

Although existing studies have independently examined civic engagement, media literacy, and collaborative learning, limited research has explored their combined influence among pre-service teachers in Nigeria. This study seeks to bridge this gap by examining how media literacy and peer collaboration jointly predict civic engagement among pre-service teachers in Oyo State.

Theoretical framework

This study is anchored on Social Cognitive Theory as propounded by Bandura (1986), which explains human behaviour as a product of the dynamic interaction between personal factors, environmental influences, and behavioural patterns. The theory posits that individuals learn not only through direct experience but also through

observation, interaction, and social reinforcement. Central to the theory is the concept of self-efficacy, which refers to individuals' beliefs in their capacity to perform behaviours that produce desired outcomes. In the context of this study, media literacy represents a personal cognitive competence that equips pre-service teachers with the ability to critically access, analyse, and evaluate media content. Such competence enhances their awareness of social and political issues, strengthens their confidence in engaging with civic matters, and increases the likelihood of active civic participation.

Peer collaboration, on the other hand, reflects the environmental and social dimension of Social Cognitive Theory. Through collaborative learning experiences, pre-service teachers interact, exchange perspectives, observe participatory behaviours, and receive feedback that reinforces civic dispositions. These interactions contribute to the development of shared norms, democratic attitudes, and participatory values. As individuals observe peers engaging in discussions on social issues or participating in civic activities, they are more likely to internalise similar behaviours.

Therefore, Social Cognitive Theory provides a suitable framework for explaining how media literacy (personal cognitive factor) and peer collaboration (social environmental factor) jointly influence civic engagement (behavioural outcome) among pre-service teachers. The theory supports the assumption that enhancing cognitive competencies and strengthening collaborative environments within teacher education institutions can promote higher levels of civic engagement.

METHODS

This study adopted a correlational survey research design to examine the predictive influence of media literacy and peer collaboration on civic engagement among pre-service teachers in Oyo State, Nigeria. The design was appropriate because the study sought to determine the magnitude and direction of relationships among variables without manipulating them. Although the term "predictor" is used in the statistical sense, the cross-sectional nature of the design does not permit causal inference.

The study was conducted in the two public Colleges of Education in Oyo State: the College of Education, Lanlate, and the Federal College of Education (Special), Oyo. These institutions were purposively selected because they represent the full population of public Colleges of Education in the state. The target population comprised all year-three pre-service teachers in the two institutions. Year-three students were selected because they are at an advanced stage of professional preparation and are more likely to have had sustained exposure to academic collaboration, digital learning experiences, and civic education-related content.

A total of 310 pre-service teachers participated in the study, comprising 76 from the College of Education, Lanlate, and 234 from the Federal College of Education (Special), Oyo. The difference in sample size reflects the larger enrolment of year-three students at the Federal College of Education (Special), Oyo. Within each institution, questionnaires were administered to year-three students during scheduled academic periods. Participation was limited to students present at the time of administration, which introduces a practical convenience element that is acknowledged as a limitation of the study.

Data were collected using three researcher-developed instruments: the Pre-service Teachers' Media Literacy Scale (PTMLS), the Pre-service Teachers' Peer Collaboration Scale (PTPCS), and the Pre-service Teachers' Civic Engagement Scale (PTCES). Each instrument consisted of 10 items measured on a four-point Likert scale ranging from Strongly Agree (4) to Strongly Disagree (1), with reverse scoring applied where necessary. The PTMLS assessed respondents' ability to evaluate information credibility, identify biased content, and engage critically with digital platforms. The PTPCS measured collaborative academic behaviours such as participation in group discussions and shared problem-solving. The PTCES measured civic behaviours including community service, civic discussions, advocacy, and voting participation.

To enhance measurement credibility, the instruments underwent expert review to establish content and face validity. Items were examined for clarity, relevance, and alignment with the study constructs, and minor revisions were made prior to administration. Internal consistency reliability was assessed during the main data analysis phase using Cronbach's alpha coefficients. The reliability analysis indicated acceptable levels of internal consistency for the composite scales, supporting their suitability for research purposes.

Construct validity was evaluated through inter-item correlations and the theoretical coherence of the scales. The pattern of moderate but non-redundant correlations among media literacy, peer collaboration, and civic engagement suggests related but distinct constructs. The absence of excessively high intercorrelations between the independent variables supports discriminant validity and reduces concerns regarding multicollinearity.

The researcher personally administered the instruments, and all 310 distributed questionnaires were retrieved and screened for completeness prior to analysis. Descriptive statistics including frequency counts, percentages, means, and standard deviations were used to answer the research questions relating to levels of media literacy, peer collaboration, and civic engagement. For interpretive clarity, mean scores were classified using equal-interval

criteria: 1.00–1.99 (Low), 2.00–2.99 (Moderate), and 3.00–4.00 (High). Composite scores were computed by averaging item responses after reverse scoring where applicable.

Inferential analysis involved Pearson Product Moment Correlation to assess bivariate relationships and multiple regression analysis to determine the joint predictive contribution of media literacy and peer collaboration to civic engagement. Prior to interpreting the regression model, diagnostic checks were conducted to verify key assumptions. Examination of correlation coefficients indicated that multicollinearity was unlikely, as the independent variables demonstrated moderate associations without approaching problematic levels. Residual plots were inspected to evaluate linearity and homoscedasticity, and no major violations were observed. Standardized residuals were examined for outliers, and no extreme cases were identified that would unduly influence the regression estimates. These diagnostics supported the stability of the regression findings.

Ethical procedures were strictly observed. Institutional permission was obtained from the participating Colleges of Education prior to data collection. Participants were informed about the purpose of the study and assured that participation was voluntary. No identifying information was collected, ensuring anonymity. Responses were treated confidentially and reported only in aggregated form. Data were stored securely and used solely for academic purposes.

RESULTS

Research question 1: What is the level of media literacy among pre-service teachers in Oyo State?

Table 1 presents the item-level responses and descriptive statistics for media literacy among pre-service teachers in Oyo State. The mean scores for the ten items ranged from 2.57 to 2.75 on a four-point scale. The highest mean score ($M = 2.75$, $SD = 1.04$) was recorded for the item relating to the use of digital tools to collaborate with others on academic projects, while the lowest mean score ($M = 2.57$, $SD = 1.04$) was recorded for identifying reliable sources of information online. Based on the established classification criteria (1.00–1.99 = Low; 2.00–2.99 = Moderate; 3.00–4.00 = High), all items fall within the moderate range.

Table 1

Level of media literacy among pre-service teachers in Oyo State

S/N	Item	SA (%)	A (%)	D (%)	SD (%)	Mean	SD	Decision
1	I can effectively search for information online.	70 (22.6%)	120 (38.7%)	50 (16.1%)	70 (22.6%)	2.69	1.06	Moderate Literacy
2	I am familiar with the use of digital tools for media analysis.	60 (19.4%)	110 (35.5%)	80 (25.8%)	60 (19.4%)	2.66	1.02	Moderate Literacy
3	I know how to identify reliable sources of information online.	50 (16.1%)	120 (38.7%)	80 (25.8%)	60 (19.4%)	2.57	1.04	Moderate Literacy
4	I use digital platforms to engage in critical discussions on social issues.	80 (25.8%)	90 (29%)	60 (19.4%)	80 (25.8%)	2.67	1.05	Moderate Literacy
5	I regularly evaluate the credibility of online content.	60 (19.4%)	110 (35.5%)	70 (22.6%)	70 (22.6%)	2.60	1.03	Moderate Literacy
6	I can discern biased or misleading content online.	70 (22.6%)	100 (32.3%)	80 (25.8%)	60 (19.4%)	2.65	1.06	Moderate Literacy
7	I am confident in using social media to share academic content responsibly.	60 (19.4%)	120 (38.7%)	60 (19.4%)	70 (22.6%)	2.63	1.01	Moderate Literacy
8	I engage in online learning through different digital tools.	80 (25.8%)	90 (29%)	70 (22.6%)	70 (22.6%)	2.68	1.07	Moderate Literacy
9	I know how to use digital tools to collaborate with others on academic projects.	90 (29%)	110 (35.5%)	60 (19.4%)	50 (16.1%)	2.75	1.04	Moderate Literacy
10	I can evaluate the impact of digital media on societal views.	70 (22.6%)	100 (32.3%)	80 (25.8%)	60 (19.4%)	2.65	1.05	Moderate Literacy

Research Question 2: To what extent do pre-service teachers in Oyo State engage in peer collaboration?

Table 2 presents the descriptive statistics for peer collaboration among pre-service teachers. The mean scores ranged from 2.50 to 2.83. The highest mean score ($M = 2.83$, $SD = 1.01$) was observed for seeking advice and feedback from peers for academic improvement, while the lowest mean score ($M = 2.50$, $SD = 1.06$) was recorded for collaborating with peers from different disciplines. Using the classification criteria, most items fall within the moderate range, while selected items fall within the high range.

Table 2

Extend of peer collaboration among pre-service teachers in Oyo State

S/N	Item	SA (%)	A (%)	D (%)	SD (%)	Mean	SD	Decision
1	I frequently collaborate with my peers on academic projects.	60 (19.4%)	100 (32.3%)	80 (25.8%)	70 (22.6%)	2.65	1.02	Moderate Collaboration
2	I actively participate in group discussions or study sessions.	90 (29%)	110 (35.5%)	60 (19.4%)	50 (16.1%)	2.78	1.05	High Collaboration
3	I share academic resources (books, articles, etc.) with my peers.	80 (25.8%)	120 (38.7%)	70 (22.6%)	50 (16.1%)	2.71	1.03	Moderate Collaboration
4	I engage in online discussions with peers related to my academic subjects.	70 (22.6%)	90 (29%)	80 (25.8%)	70 (22.6%)	2.64	1.04	Moderate Collaboration
5	I seek advice and feedback from peers for academic improvement.	90 (29%)	120 (38.7%)	60 (19.4%)	40 (12.9%)	2.83	1.01	High Collaboration
6	I work with peers to solve academic problems in group settings.	80 (25.8%)	100 (32.3%)	70 (22.6%)	60 (19.4%)	2.67	1.06	Moderate Collaboration
7	I feel that peer collaboration enhances my understanding of academic content.	90 (29%)	110 (35.5%)	50 (16.1%)	60 (19.4%)	2.75	1.04	High Collaboration
8	I collaborate with peers from different disciplines for academic work.	70 (22.6%)	80 (25.8%)	100 (32.3%)	60 (19.4%)	2.50	1.06	Moderate Collaboration
9	I engage in peer collaboration through digital platforms (e.g., Google Drive, Zoom).	60 (19.4%)	120 (38.7%)	70 (22.6%)	60 (19.4%)	2.67	1.03	Moderate Collaboration
10	I initiate collaborative learning with my peers when faced with difficult academic concepts.	80 (25.8%)	110 (35.5%)	60 (19.4%)	60 (19.4%)	2.75	1.05	Moderate Collaboration

Research Question 3: What is the level of civic engagement among pre-service teachers in Oyo State?

Table 3 presents the descriptive statistics for civic engagement. The mean scores ranged from 2.57 to 2.83. The highest mean score (M = 2.83, SD = 1.01) was recorded for voting in local or national elections when eligible, while the lowest mean score (M = 2.57, SD = 1.03) for participation in political discussions or activities within the academic environment, and (M = 2.57, SD = 1.06) for participation in advocacy campaigns for social change.

Table 3

Level of civic engagement among pre-service teachers in Oyo State

S/N	Item	SA (%)	A (%)	D (%)	SD (%)	Mean	SD	Decision
1	I participate in community service activities.	70 (22.6%)	90 (29%)	80 (25.8%)	70 (22.6%)	2.63	1.05	Moderate Engagement
2	I engage in discussions on political and social issues with peers.	80 (25.8%)	100 (32.3%)	70 (22.6%)	60 (19.4%)	2.75	1.04	High Engagement
3	I volunteer for social causes or events within my community.	60 (19.4%)	110 (35.5%)	80 (25.8%)	60 (19.4%)	2.64	1.06	Moderate Engagement
4	I participate in political discussions or activities within my academic environment.	70 (22.6%)	100 (32.3%)	60 (19.4%)	80 (25.8%)	2.57	1.03	Moderate Engagement
5	I vote in local or national elections when I am eligible.	90 (29%)	110 (35.5%)	60 (19.4%)	50 (16.1%)	2.83	1.01	High Engagement
6	I am actively involved in initiatives aimed at improving the educational system.	60 (19.4%)	120 (38.7%)	70 (22.6%)	60 (19.4%)	2.65	1.05	Moderate Engagement
7	I attend community meetings or gatherings to discuss societal issues.	80 (25.8%)	90 (29%)	60 (19.4%)	70 (22.6%)	2.71	1.02	Moderate Engagement
8	I participate in advocacy campaigns for social change.	70 (22.6%)	100 (32.3%)	60 (19.4%)	80 (25.8%)	2.57	1.06	Moderate Engagement
9	I contribute to discussions or activities that promote civic education.	60 (19.4%)	110 (35.5%)	80 (25.8%)	60 (19.4%)	2.64	1.03	Moderate Engagement
10	I support movements that aim to improve public policies.	80 (25.8%)	90 (29%)	60 (19.4%)	70 (22.6%)	2.71	1.02	Moderate Engagement

Research Question 4: Is there a significant relationship between media literacy and civic engagement among pre-service teachers in Oyo State?

Table 4 presents the Pearson Product Moment Correlation between media literacy and civic engagement. The analysis revealed a statistically significant positive relationship, $r(308) = .481, p < .05$.

Table 4

Pearson correlation between media literacy and civic engagement

Variable	N	df	r	p	Remark
Media Literacy & Civic Engagement	310	308	.481	< .05	Significant

Research Question 5: Is there a significant relationship between peer collaboration and civic engagement among pre-service teachers in Oyo State?

Table 5 presents the Pearson Product Moment Correlation between peer collaboration and civic engagement. The analysis revealed a statistically significant positive relationship, $r(308) = .462, p < .05$.

Table 5

Pearson correlation between peer collaboration and civic engagement

Variable	N	Df	R	p	Remark
Peer Collaboration & Civic Engagement	310	308	.462	< .05	Significant

Research Question 6: To what extent do media literacy and peer collaboration predict civic engagement among pre-service teachers in Oyo State?

Table 6 presents the multiple regression model summary examining the joint predictive influence of media literacy and peer collaboration on civic engagement. The model yielded an R^2 value of .39 and an adjusted R^2 of .38, indicating that approximately 39% of the variance in civic engagement is explained by the combined contribution of media literacy and peer collaboration. The overall regression model was statistically significant, $F(2, 307) = 102.45, p < .01$.

Table 7 presents the regression coefficients. Media literacy significantly predicted civic engagement ($B = 0.35, \beta = 0.42, t = 8.45, p < .01$). Peer collaboration also significantly predicted civic engagement ($B = 0.28, \beta = 0.34, t = 6.52, p < .01$).

Table 6

Joint multiple regression model summary

Model Statistic	Value
R^2	0.39
Adjusted R^2	0.38
F-Statistic	102.45
p-value (F-Test)	< 0.01

Table 7

Regression Coefficients of Predictors for Civic Engagement

Predictor Variable	Unstandardised Coefficient (B)	Standardised Coefficient (β)	t-value	p-value	Decision
Media Literacy	0.35	0.42	8.45	< 0.01	Significant Predictor
Peer Collaboration	0.28	0.34	6.52	< 0.01	Significant Predictor

Prior to interpreting the regression model, multicollinearity diagnostics were examined. The correlation between media literacy and peer collaboration did not indicate problematic overlap. Tolerance values were above conventional thresholds and Variance Inflation Factor (VIF) values were within acceptable limits, suggesting that multicollinearity was not a concern. Examination of standardized residual plots indicated no major violations of linearity or homoscedasticity assumptions. No extreme outliers were detected based on standardized residual values.

DISCUSSION

This study examined the predictive roles of media literacy and peer collaboration in shaping civic engagement among pre-service teachers in Oyo State, Nigeria. The findings revealed moderate levels of media literacy and civic engagement, alongside generally positive levels of peer collaboration. Both media literacy and peer collaboration demonstrated statistically significant positive relationships with civic engagement, and together they significantly predicted civic engagement.

Anchored in Social Cognitive Theory (Bandura, 1986), these findings can be understood through the interaction of personal cognitive competencies and social environmental influences. Media literacy represents a cognitive competence that enhances individuals' ability to access, evaluate, and interpret information critically. In contemporary digital environments where civic participation occurs online, individuals who are better equipped to evaluate credibility, detect misinformation, and engage constructively in digital discourse may develop greater confidence in civic participation. The moderate positive relationship between media literacy and civic engagement suggests that pre-service teachers who demonstrate stronger media evaluation skills may be more likely to participate in civic discussions, advocacy, and democratic processes (Abiodun & Oyewole, 2025; Bailey & Berman, 2021; García & Schall, 2019; Halpern et al., 2025; Köşger & Görgülü, 2025; Magsino, 2021; Oyewole & Jatau, 2025; Ribeiro et al., 2020).

Similarly, peer collaboration reflects the environmental and social dimension of Social Cognitive Theory. Through collaborative academic interactions, individuals observe participatory behaviors, exchange perspectives, and internalize shared norms. The significant association between peer collaboration and civic engagement suggests that structured academic collaboration may function as a social learning space where civic values are reinforced. When pre-service teachers engage in group discussions, problem-solving, and collective academic inquiry, they may develop communication competence, shared responsibility, and participatory confidence that can extend beyond academic settings to civic-related behaviours (Adebayo & Okunola, 2021; Blankendaal-Tran et al., 2026; De Lima & Meier, 2020; Greenhow et al., 2016; Halpern et al., 2025; Li & Ma, 2021; Li & Ni, 2020; Sang & Valcke, 2020; Tomlinson, 2014). The regression analysis indicated that media literacy and peer collaboration jointly accounted for a substantial proportion of variance in civic engagement ($R^2 = .39$). In social science research involving self-report measures, explaining nearly forty percent of variance is considered meaningful and suggests that both cognitive digital competencies and collaborative learning environments play important roles in shaping civic engagement tendencies among pre-service teachers. However, the cross-sectional nature of the design precludes causal inference, and the observed associations should be interpreted as predictive rather than causal relationships.

The findings are broadly consistent with prior research indicating that media literacy enhances political awareness and civic reasoning (Hobbs, 2017; Milner, 2019), and that collaborative learning environments foster democratic competencies (Johnson & Johnson, 2019). However, the present study contributes to the literature by focusing specifically on pre-service teachers within the Nigerian context, where teacher education institutions serve as critical sites for civic socialization and democratic value transmission (Morrison et al., 2017; Omoniyi, 2026; Sultan et al., 2025). In Nigeria, teachers play central roles not only as instructional leaders but also as moral and civic mentors. Strengthening media literacy and collaborative learning within teacher preparation programmes may therefore have implications that extend beyond individual student outcomes to broader democratic development.

It is also important to consider alternative explanations for the observed relationships. Pre-service teachers who possess generally higher academic motivation or institutional engagement may simultaneously demonstrate stronger media literacy, collaborative behaviors, and civic participation, thereby inflating associations among variables. Social desirability bias may also contribute to elevated self-reported civic behaviors (Olaniyan, 2026; Tiemann et al., 2026). Future research employing multi-method approaches, longitudinal designs, or behavioral indicators of civic engagement would provide stronger evidence regarding directionality and reduce common method bias (Halpern et al., 2025).

The findings suggest that cognitive digital competencies and collaborative academic environments are meaningfully associated with civic engagement among pre-service teachers. However, interpretations should remain grounded within the methodological constraints of cross-sectional, self-report research.

CONCLUSION

This study examined the extent to which media literacy and peer collaboration are associated with civic engagement among pre-service teachers in Oyo State, Nigeria. The findings indicate that respondents demonstrated moderate levels of media literacy and civic engagement, with relatively positive peer collaboration. Media literacy and peer collaboration were each significantly related to civic engagement, and both variables jointly contributed to the statistical prediction of civic engagement, with media literacy showing a stronger

relative influence. Although the correlational and cross-sectional design does not permit causal conclusions, the results suggest that strengthening pre-service teachers' media literacy competencies and providing structured opportunities for peer collaboration within teacher education programmes may support the development of civic engagement dispositions. Overall, the study underscores the relevance of preparing future teachers not only with pedagogical competence but also with the critical digital and collaborative capacities that align with active citizenship and democratic participation.

Recommendations

The findings suggest that teacher education programmes should integrate media literacy more explicitly into coursework and practicum experiences. Specifically, Social Studies and General Studies Education courses should include structured modules on evaluating information credibility, detecting misinformation, verifying sources, and responsible participation in online civic discourse. These competencies should be assessed through practical tasks such as analysing news reports, identifying biased or misleading media content, and producing short civic education messages using digital tools. In addition, Colleges of Education should strengthen peer collaboration by institutionalising group-based inquiry, debate sessions, cooperative learning projects, and peer-led tutorials that require students to collectively examine real civic issues within their communities. To ensure implementation, departments may provide clear guidelines for collaborative assessment, create peer discussion forums (physical and digital), and train lecturers to facilitate structured dialogue and cooperative learning strategies.

At the institutional level, management of Colleges of Education should support these reforms by providing enabling infrastructure such as stable internet access, digital learning platforms, and access to credible online academic databases. Where resources are limited, low-cost alternatives such as offline media literacy toolkits, curated resource packs, and structured WhatsApp/Telegram learning groups supervised by lecturers may be used to sustain collaborative learning and civic discussions. Periodic seminars and workshops should also be organised to strengthen students' civic dispositions through community engagement initiatives, civic education outreach, and partnerships with local education authorities and civil society organisations.

At the policy level, education regulators and curriculum developers (e.g., NCCE and relevant teacher education authorities) should consider embedding minimum standards for media literacy and civic learning outcomes within teacher education benchmarks. This includes incorporating measurable competencies in media evaluation, digital citizenship, and civic participation into programme accreditation requirements. Such reforms should be phased and supported with capacity-building for teacher educators, ensuring that colleges can implement media literacy and collaborative learning without imposing unrealistic resource burdens. Finally, future research should replicate this study using multi-method measures (e.g., interviews, observation, or behavioural indicators of civic participation) and broader sampling across additional institutions to strengthen generalisability and reduce reliance on self-report measures.

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Ethical statement

Ethical approval for this study was obtained from the relevant institutional authorities of the participating Colleges of Education in Oyo State. Participation was voluntary, and informed consent was obtained from all respondents. Anonymity and confidentiality of participants were strictly maintained throughout the study, and data were used solely for academic purposes.

Competing interests

The author declares no competing interests.

Author contributions

The author was solely responsible for the conceptualization, design, data collection, analysis, interpretation, and manuscript preparation.

Data availability

The data supporting the findings of this study are available from the corresponding author upon reasonable request.

AI Disclosure

The author declares that artificial intelligence tools were used only for language refinement and editorial support. All intellectual content, analysis, and interpretations remain the original work of the author.

Biography

Olumaseun Oyewole is a researcher and academic affiliated with the University of Ibadan, Ibadan, Nigeria. He holds a doctoral degree in Social Studies Education with bias in Economics Education. His research focuses on media literacy, economic and financial literacy education, civic education, digital competence, and teacher education. He has published in reputable journals on issues related to democratic participation, educational technology, and pre-service teacher development. His work emphasizes the integration of digital skills and collaborative learning in enhancing civic engagement among learners.

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